Preamble

An Asterisk "*" throughout this document denotes legal authority, limitations and conditions which are not federally enforceable.

Concurrent Permit Actions Performed as Part of the Review and Issuance of Permit 632009730-F01

Revised Construction Permits Issued in Conjunction with Permit 632009730-F01 under s. NR 406.11, Wis. Adm. Code: 91-POY-126-R1 and 88-IRS-049-R1

Revised Operation Permits Issued in Conjunction with Permit 632009730-F01 under ss. NR 407.11, 407.12, 407.13 and/or 407.14, Wis. Adm. Code: EOP-10-KJC-83-32-081-R1, and MIA-10-KJC-83-42-053-R1

Stack and Process Index

Stack S03, Process P03 - 2 Lithographic Presses with Natural Gas/Propane Drying Ovens - Installed 1991 (PLO-05-H and PLO-07-H)

Stack S08, Process P08 - 1 Roll Coater with Natural Gas/Propane Conveyor Oven - Installed 1991 (PCO-08-H)

Stack S09, Process P09 - 8 Screening Lines, Each consisting of 2 screening machines and one natural gas/propane drying oven, plus one single screening machine. This source also includes 4 electric box ovens - Installed 1991 (PSO-11-H; PSO-12-H; PSO-18-H; PSO-19-H; PSO-21-H; PSO-23-H; PSO-26-H and PSO-27-H)

Stack S36, Process P36 - Towel Dryer - Installed 1991

Stack S40, Process P40 - Screen Cleaning Machine - Installed 1998

Stack S14, Process P14 - Miscellaneous Facility Wide Cleanup

Stack S50, Process P50 - Two Digital Printing Lines each with an IR Curing Oven - Installed 2001

<u>Permit Shield</u> Unless precluded by the Administrator of the USEPA, compliance with all emission limitations in this operation permit is considered to be compliance with all emission limitations established under ss. 285.01 to 285.87, Wis. Stats., and emission limitations under the federal clean air act, that are applicable to the source if the permit includes the applicable limitation or if the Department determines that the emission limitations do not apply. The following emission limitations were reviewed in the analysis and preliminary determination and were determined not to apply to this stationary source:

Process P03: Because the facility is not located in Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county the requirements of s. NR 422.142, Wis. Adm. Code do not apply to P03, pursuant to s. NR 422.142(1), Wis. Adm. Code.

Process P08: Because the facility is not located in Brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha or Winnebago counties and because the total VOC emissions from the facility, with all emission control equipment inoperative have not exceeded 100 tons per year, P08 is not subject to the limitations for fabric and vinyl coating in s. NR 422.08, Wis. Adm. Code, pursuant to s. NR 422.03(3), Wis. Adm. Code. Additionally the facility has elected restrictions to limit the volatile organic compound emissions to less than 100 tons per year.

Process P09: Because the facility is not located in Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county, P09 is exempt from the requirements of s. NR 422.145, Wis. Adm, Code, pursuant to s. NR 422.03(4m)(a), Wis. Adm. Code.

Process P14: Because cleanup (P14) is performed using a wipe cleaning operation and the facility is located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha counties, it is exempt from the requirements of s. NR 423.03, Wis. Adm. Code, pursuant to s. NR 423.03(2)(g)1., Wis. Adm. Code. The cleanup solvent use (P14) is subject to general emission limitations for volatile organic compounds outline in ss. NR 419.03 and NR 419.04, Wis. Adm. Code which would be included in Part II of any operation permit issued by the Department.

Process P40: Because the facility is not located in brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, Washington or Waukesha counties, because the screen cleaning machine is a cold cleaner, and because not more than 1.5 gallons of solvent are added per day, P40 is exempt from the requirements of s. NR 423.03, Wis. Adm. Code, pursuant to s. NR 423.03(2)(a), Wis. Adm. Code. The screen cleaning machine is subject to the general emission limitations for volatile organic compounds outlined in ss. NR 419.03 and NR 419.04, Wis. Adm. Code

which would be included in Part II of any operation permit issued by the Department.

Process P50: Because the facility is not located in Kenosha, Milwaukee, Ozaukee, Racine, Washington, or Waukesha counties, P50 is not subject to the limitations for plastic parts coating in s. NR 422.083, Wis. Adm. Code, pursuant to s. NR 422.083(1), Wis. Adm. Code.

Facility: Emissions from firing natural gas and propane, which are group I virgin fossil fuels, in the ovens associated with P03, P08, and P09 are exempt from ch. NR 445, Wis. Adm. Code requirements, pursuant to ss. NR 445.04(1)(c)1., (3)(c)1, (4)(c)1., and (4r)(b)1. and ss. NR 445.05(1)(c)1., (3)(c)1, (4)(c)1., and (4r)(b)1., Wis. Adm. Code.

<u>Part I</u> The headings for the areas in the permit are defined below. The legal authority for these limitations or methods follows them in [brackets].

Pollutant -- This area will note which pollutant is being regulated by the permit.

<u>Limitations</u> -- This area will list all applicable emission limitations that apply to the source, including case-by-case limitations such as Latest Available Control Techniques (LACT), Best Available Control Technology (BACT), or Lowest Achievable Emission Rate (LAER). It will also list any voluntary restrictions on hours of operation, raw material use, or production rate requested by the permittee to limit potential to emit.

<u>Compliance Demonstration</u> -- The compliance demonstration methods outlined in this area may be used to demonstrate compliance the associated emission limit or work practice standard listed under the corresponding *Limitations* area. The compliance demonstration area contains limits on parameters or other mechanisms that will be monitored periodically to insure compliance with the limitations. The requirement to test as well as initial and periodic test schedules, if testing is required, will be stated here. Notwithstanding the compliance determination methods which the owner or operator of a sources is authorized to use under ch. NR 439, Wis. Adm. Code, the Department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations.

<u>Reference Test Methods, Recordkeeping, and Monitoring Requirements</u> -- Specific USEPA Reference test methods or other approved test methods will be contained in this area and are the methods that must be used whenever testing is required. A reference test method will be listed even if no testing is immediately required. Also included in this area are any recordkeeping requirements and their frequency and reporting requirements. Accuracy of monitoring equipment and frequency of monitoring shall meet, at a minimum, the requirements of ss. NR 439.055(3) and (4), Wis. Adm. Code, as specified in Part II of this permit.

<u>Condition Type</u> -- This column will specify other conditions that are applicable to the entire facility that may not be tied to one specific pollutant.

Conditions -- Specific conditions usually applicable to the entire facility or compliance requirements.

<u>Compliance Demonstration</u> -- This area contains monitoring and testing requirements and methods to demonstrate compliance with the conditions.

<u>PART II</u> -- This section contains the general limitations that the permittee must abide by. These requirements are standard for most sources of air pollutants so they are included in this section with every permit.

AIR POLLUTION CONTROL OPERATION PERMIT

EI FACILITY NO. 632009730 PERMIT NO. 632009730-F01

TYPE: Synthetic Minor, Non-Part 70 Source Operation Permit

Revision of Air Pollution Control Permits: 91-POY-126, 88-IRS-049, MIA-10-KJC-83-42-053,

EOP-10-KJC-83-32-081A, EOP-10-KJC-83-32-081 issued 8/9/1984 and altered 2/2/1990, 7/25/1988, 5/27/1987, 7/16/1986, 2/12/1985,

8/9/1984.

In compliance with the provisions of Chapter 285 and section 299.80, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code,

Name of Source: Northern Engraving Corporation

Street Address: 1023 Sand Lake Road

Holmen, La Crosse County, Wisconsin

Responsible Official, & Title: Bruce Corning, VP Management Systems

is authorized to operate printed/coated plastic sheet manufacturing facility in conformity with the conditions herein.

THIS OPERATION PERMIT EXPIRES JUNE 10, 2007.

RENEWAL APPLICATION MUST BE SUBMITTED AT LEAST 12 MONTHS, BUT NOT MORE THAN 18 MONTHS, PRIOR TO THIS EXPIRATION DATE. [s. NR 407.09(1)(b)1., Wis. Adm. Code].

No permittee may continue operation of a source after the operation permit expires, unless the permittee submits a timely and complete application for renewal of the permit [s.285.66(3), Wis. Stats. and NR 407.04(2), Wis. Adm. Code].

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.

Dated at Wisconsin Rapids Wisconsin	
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STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By

Joseph Ancel, Southeast Team Supervisor West Central Region Air Program

PART I SPECIFIC PERMIT CONDITIONS

A. Part I.A. of this operation permit is effective so long as the permittee is operating under a Cooperative Agreement with the Department as entered into under s. 299.80 Wis. Stats. If any such Cooperative Agreement expires or is revoked for any reason, Part I.A. of this operation permit is no longer effective and Part I.B. becomes the effective operation permit for the facility. If any such Cooperative Agreement expires or is revoked for any reason, the permittee shall comply with any delayed compliance deadlines and practical interim requirements established by the Department in a written revocation decision until the Department issues the approvals required under chs. 280 to 295, Wis. Stats, that were replaced by the above referenced Cooperative Agreement.

1. Volatile Organic Compound Emissions

a. Limitations:

(1) The total volatile organic compound emissions from the facility may not exceed 85 tons for each 12 consecutive month period. [s. 299.80(4)(b), Wis. Stats and s. 285.65(7), Wis. Stats.]

b. Compliance Demonstration Methods:

(1) Each month the permittee shall calculate the total volatile organic compound emissions from the facility as follows:

$$E = (1 \text{ ton}/2000 \text{ lbs}) \times \{[(U_1 \times W_1 \times C_1) + (U_2 \times W_2 \times C_2) + ... + (U_n \times W_n \times C_n)] - [(S_1 \times P_1) + (S_2 \times P_2) + ... + (S_m \times P_m)]\}$$

where:

E is the monthly VOC emissions (tons/month);

U is the monthly usage of each ink, coating, solvent, or other VOC containing material used during the month (gallons/month);

W is the density of each ink, coating, solvent, or other VOC containing material used during the month (pounds/gallon) C is the VOC content of each ink, coating, solvent, or other VOC containing material used during the month expressed as a weight fraction (i.e. if a material is 25% VOC by weight C would be 0.25);

n identifies each ink, coating, solvent or other VOC containing material used during the month;

S is the amount of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site each month (gallons/month);

P is the VOC content of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site each month in pounds per gallon;

m identifies each spent ink, coating, solvent or other VOC containing material recovered and shipped off site during the month.

[s. NR 407.09(4)(a)1., Wis. Adm. Code]

- (2) To demonstrate compliance with condition I.A.1.a.(1), the permittee shall calculate the total volatile organic compound emissions from the facility over each 12 consecutive month period by summing the monthly volatile organic compound emissions as calculated in I.A.1.b.(1) for each consecutive 12 month period. This calculation shall be performed within twenty calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]
- (3) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content (C_n) and the density (W_n) of the of the inks, coatings, solvents or other VOC containing materials used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (4) The permittee shall analyze the spent ink, coating, solvent and other VOC containing material recovered and shipped off site to determine the VOC content (P) no less than: (a) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (b) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

c. Record Keeping and Monitoring Requirements:

- (1) The permittee shall keep records of the following for each ink, coating, solvent, or other VOC containing material used at the facility:
- (a) A unique name or identification number; and
- (b) The VOC content, expressed as a weight fraction (C_n) .
- [s. NR 439.04(1)(d), Wis. Adm. Code]
- (2) The permittee shall keep monthly records of:
- (a) The amount of each ink, coating, solvent, or other VOC containing material used in gallons per month (U_n) ;
- (b) The density of each ink, coating, solvent, or other VOC containing material used in pounds per gallon (W_n) ;
- (c) The amount of spent ink, coating, solvent, or other VOC containing material recovered and shipped off site in gallons per month (S_m) ;
- (d) The VOC content of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site in pounds per gallon (P_m).
- (e) The total monthly VOC emissions from the facility in tons per month (E), as calculated in I.A.1.b.(1); and
- (f) The total VOC emissions from the facility in tons per year as calculated in I.A.1.b.(2).
- [s. NR 439.04(1)(d), Wis. Adm. Code]

d. Reference Test Methods:

- (1) <u>Reference Test Method for Volatile Organic Compound Emissions:</u> Whenever compliance emission testing is required, US EPA Method 18, 25, 25A or 25B shall be used to demonstrate compliance. [s. NR 439.06(3)(a), Wis. Adm. Code]
- (2) <u>Reference Test Method for Volatile Organic Compound Content:</u> Whenever VOC content testing is required, US EPA Method 24 or 24A shall be used to determine the organic solvent content, the volume of solids, the weight of solids, the water content and the density of inks. [s. NR 439.06(3)(b), Wis. Adm. Code]

2. Hazardous Air Pollutant Emissions

a. Limitations:

- (1) The emissions of each hazardous air pollutant regulated by the Clean Air Act shall be less than 8 tons for each 12 consecutive month period. [s. 299.80(4)(b), Wis. Stats.] [s. 285.65(7), Wis. Stats.]
- (2) The total emissions of all hazardous air pollutants regulated by the Clean Air Act combined shall be less than 20 tons for each 12 consecutive month period. [s. 299.80(4)(b), Wis. Stats.] [s. 285.65(7), Wis. Stats.]

b. Compliance Demonstration Methods:

(1) Each month the permittee shall calculate the total emissions of <u>each hazardous air pollutant</u> from the facility regulated by the Clean Air Act as follows:¹

$$E_x = (1 \text{ ton/} 2000 \text{ lbs)} \times \{ [(U_1 \times W_1 \times H_1) + (U_2 \times W_2 \times H_2) + ... + (U_n \times W_n \times H_n)] - [(S_1 \times I_1) + (S_2 \times I_2) + ... + (S_m \times I_m)] \}$$

where:

 E_x is the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/month); x identifies each HAP emitted from the facility

U is the monthly usage of each ink, coating, solvent, or other HAP containing material used during the month (gallons/month);

W is the density of each ink, coating, solvent, or other HAP containing material used during the month (pounds/gallon) H is the HAP content of each ink, coating, solvent, or other HAP containing material used during the month expressed as a weight fraction (i.e. if a material is 25% HAP by weight H would be 0.25);

n identifies each ink, coating, solvent or other HAP containing material used during the month;

¹ This calculation shall be performed for each hazardous air pollutant regulated by the Clean Air Act that is emitted from the facility.

S is the amount of each spent ink, coating, solvent or other HAP containing material recovered and shipped off site each month (gallons/month);

I is the HAP content of each spent ink, coating, solvent or other HAP containing material recovered and shipped off site each month in pounds per gallon;

m identifies each spent ink, coating, solvent or other HAP containing material recovered and shipped off site during the month.

[s. NR 407.09(4)(a)1., Wis. Adm. Code]

- (2) To demonstrate compliance with condition I.A.2.a.(1), the permittee shall calculate the emissions of <u>each</u> hazardous air pollutant regulated by the Clean Air Act over each 12 consecutive month period by summing the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act as calculated in I.A.2.b.(1) for each consecutive 12 month period. This calculation shall be performed within twenty calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]
- (3) Each month the permittee shall calculate the <u>total</u> emissions of hazardous air pollutants regulated by the Clean Air Act as follows:

 $E_{hap} = \Sigma E_x$

where:

 E_{hap} is the monthly total emissions of all hazardous air pollutants regulated by the Clean Air Act that are emitted by the facility (tons/month);

 E_x is the monthly emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/month) as calculated in I.A.2.b.(1);

x identifies each HAP emitted from the facility.

[s. NR 407.09(4)(a)1., Wis. Adm. Code]

- (4) To demonstrate compliance with condition I.A.2.a.(2), the permittee shall calculate the total emissions of <u>all</u> hazardous air pollutants regulated by the Clean Air Act over each 12 consecutive month period by summing the monthly emissions of all hazardous air pollutants regulated by the Clean Air Act as calculated in I.A.2.b.(3) for each consecutive 12 month period. This calculation shall be performed within twenty calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]
- (5) The permittee shall use coating manufacturer's formulation data to determine the HAP content (H_n) of the of the inks, coatings, solvents or other HAP containing materials used. [s. NR 439.04(1)(d), Wis. Adm. Code]
- (6) The permittee shall analyze the spent ink, coating, solvent and other HAP containing material recovered and shipped off site to determine the HAP content (H) no less than: (a) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (b) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

c. Record Keeping and Monitoring Requirements:

- (1) The permittee shall keep records of the following for each ink, coating, solvent, or other HAP containing material used at the facility:
- (a) A unique name or identification number; and
- (b) The weight fraction of each HAP contained in the material (H_n) .

[s. NR 439.04(1)(d), Wis. Adm. Code]

- (2) The permittee shall keep monthly records of:
- (a) The amount of each ink, coating, solvent, or other HAP containing material used in gallons per month (U_n);
- (b) The density of each ink, coating, solvent, or other HAP containing material used in pounds per gallon (W_n);
- (c) The amount of spent ink, coating, solvent, or other HAP containing material recovered and shipped off site in gallons per month (S_m) ;
- (d) The amount of each HAP contained in each spent ink, coating, solvent or other HAP containing material recovered and shipped off site in pounds per gallon (I_m) ;
- (e) The facility total monthly emissions of each HAP in tons per month (E_x), as calculated in I.A.2.b.(1);
- (f) The total monthly HAP emissions from the facility in tons per month (E_{hap}), as calculated in I.A.2.b.(3);
- (g) The facility total emissions of each HAP in tons per year as calculated in I.A.2.b.(2).

(h) The total HAP emissions from the facility in tons per year as calculated in I.A.2.b.(4). [s. NR 439.04(1)(d), Wis. Adm. Code]

d. Reference Test Methods:

(1) <u>Reference Test Method for Hazardous Air Pollutant Emissions:</u> Whenever compliance emission testing is required, a method approved by the Department in writing shall be used to demonstrate compliance. [s. NR 439.06(8), Wis. Adm. Code]

3. Particulate Matter Emissions

a. Limitations:

(1) Particulate matter emissions from each stack exhausting non-electric drying ovens may not exceed 0.15 pounds per mmBtu of heat input to each stack. [s. NR 415.06(2)(a), Wis. Adm. Code]

b. Compliance Demonstration Methods:

(1) The permittee shall only fire natural gas and/or propane in each non-electric drying oven at the facility.² [ss. NR 407.09(1)(c)1.b., Wis. Adm. Code and 285.65(3) and 285.63(1)(a), Wis. Stats.]

c. Record Keeping and Monitoring Requirements:

(1) The permittee shall retain on site, plans and specifications that indicate each drying oven's fuel usage design capabilities.³ [s. NR 439.04(1)(d), Wis. Adm. Code]

d. Reference Test Methods:

(1) <u>Reference Test Method for Particulate Matter Emissions:</u> Whenever compliance emission testing is required, US EPA Methods 5 and Method 202 shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code]

4. Visible Emissions

a. Limitations:

(1) The visible emissions from each of the stacks exhausting emissions units at the facility may not exceed 20% opacity [s. NR 431.05, Wis. Adm. Code]

b. Compliance Demonstration Methods:

² Because the maximum theoretical emissions while firing these fuels are less than the allowable limit of 0.15 pounds per million Btu heat input, limiting the type of fuel used is adequate to demonstrate compliance with the particulate matter emission limit. Maximum theoretical particulate matter emissions were calculated using an emission factor of 7.6 pounds per million cubic feet of natural gas fired from AP-42, 5th edition, ch. 1.4.

³ These plans and specifications are sufficient because each non-electric drying oven is designed to only burn natural gas and/or propane.

(1) The permittee shall only fire natural gas and/or propane in each non-electric drying oven. ⁴ [ss. 285.65(3) and 285.63(1)(a), Wis. Stats.]

c. Record Keeping and Monitoring Requirements:

(1) The permittee shall retain on site, plans and specifications that indicate each drying oven's fuel usage design capabilities.⁵ [s. NR 439.04(1)(d), Wis. Adm. Code]

d. Reference Test Methods:

(1) <u>Reference Test Method for Visible Emissions:</u> Whenever compliance emission testing is required, US EPA Method 9 shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]

5. Operational Flexibility

- **a. New Equipment Construction and Modification:** The permittee may commence construction or modification (but not operation) of new process equipment prior to obtaining a construction permit, provided the following conditions are met. The following conditions do not apply if a proposed project is exempt from the requirement to obtain a construction permit, pursuant to s. NR 406.04, Wis. Adm. Code. [s. 299.80(2)(h) and (4)(b), Wis. Stats.]
 - (1) The permittee shall submit the following information to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI, 54601 **OR** other location specified by the Department:
 - (a) Two copies of a complete construction and operation permit application describing the proposed equipment;
 - (b) An application fee of \$1350 or other amount as required by s. NR 410.03(1)(d), Wis. Adm. Code; and
 - (c) Information describing how the interested persons group was notified of the proposed project. [ss. 299.80(10) and (11)(b), Wis. Stats.]
 - (2) The Department shall process the permit application in accordance with ss. 285.60 through 285.69, Wis. Stats and ss. NR 406 and NR 407, Wis. Adm. Code, however, the permittee need not wait for permit issuance to commence construction. The Department shall process the permit application as both a construction permit and a significant revision to this operation permit and issue both permits simultaneously to reduce the administrative burden of issuing a construction permit that expires 18 months after issuance followed by an operation permit. The Department shall send an invoice outlining the fees required for processing the construction permit for the proposed project, including the fees for an expedited permit review authorized by s. NR 410.03(o), Wis. Adm. Code, less the \$1350 permit application fee. [ss. 299.80(2)(h), (4)(b), (10) and (11)(b), Wis. Stats.]
 - (3) The permittee shall pay the total amount of the fee invoice within 30 days of receipt.⁶ [s. 299.80(10), Wis. Stats.]
 - (4) The permittee shall continue to comply with all the requirements of Part I.A. of this permit so long as the cooperative agreement is in affect. 7 [s. 299.80(2)(h) and (4)(b), Wis. Stats.]

⁴ It is not expected that the visible emission limitation of 20% opacity would be exceeded while firing these fuels. Therefore restricting the type of fuel used is adequate to ensure compliance with the emission limitation for fuel burning installations. The remaining stacks at the facility exhaust volatile organic compound emissions, and visible emissions are not expected from these other emission points.

⁵ These plans and specifications are sufficient because each non-electric drying oven is designed to only burn natural gas and/or propane.

⁶ Pursuant to s. 299.80(10), Wis. Stats., a participant in a cooperative agreement shall pay the same fees required under chs. 280 to 295, Wis. Stats. that it would be required to pay if it had not entered into a cooperative agreement. Therefore, while the requirement to obtain a construction permit prior to installation is waived, the permittee is still required to pay the fees that would have been assessed had a construction permit been issued under ch. NR 406, wis. Adm. Code.

⁷ By continuing to comply with the facility wide emission limitations outlined in Part I.A. the net emissions increase from any new sources or relocation of any existing sources from other facilities, will not exceed the major stationary source levels of s. NR 405.02(22)(a), Wis. Adm. Code triggering Prevention of Significant Deterioration



- (5) Nothing in this section or in any Cooperative Agreement between the Department and the permittee shall be construed as a guarantee that the Department will issue an air pollution control construction and operation permit for a proposed project. The decision on whether to approve a permit application will be made according to the requirements of chapters NR 400 through NR 499, Wis. Adm. Code and s. 285.60 through 285.69, Wis. Stats. If the Department denies a permit application pursuant to ss 285.61 through 285.64, Wis. Stats. all costs and risks associated with installing and operating the proposed equipment shall be incurred solely by the permittee. In the event that the construction and operation permit application for the proposed project is denied, the permittee shall cease construction of the equipment in question immediately.
- **b. New Equipment Operation:** The permittee may operate new process equipment, provided one of the following alternate scenarios are met. The following conditions do not apply if a proposed project is exempt from the requirement to obtain a construction permit, pursuant to s. NR 406.04, Wis. Adm. Code. [s. 299.80(2)(h) and (4)(b), Wis. Stats.]
 - (1) Alternate Scenario #1: The permittee may operate new process equipment provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the Department issues a construction permit pursuant to ss. 285.60 through 285.69, Wis. Stats and ss. NR 406 and NR 407, Wis. Adm. Code. The permittee shall operate the new process equipment in compliance with the conditions contained in any construction permit issued by the Department. [s. NR 406.03, Wis. Adm. Code]
 - (2) Alternate Scenario #2: The permittee may initially operate new process equipment prior to obtaining a construction permit provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the following conditions are met: [s. 299.80(2)(h) and (4)(b), Wis. Stats.]
 - (a) The permittee shall submit two copies of the following information to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI, 54601 **OR** other location specified by the Department, 14 calendar days prior to the date of initial operation:
 - (i) Information identifying all applicable requirements from the Wisconsin Statutes, Wisconsin Administrative Code, and federal Clean Air Act for the proposed equipment;
 - (ii) A quantification of the air pollution emissions that would result from the proposed project;
 - (iii) A computer dispersion modeling analysis showing the National Ambient Air Quality Standards will be protected if the proposed project results in an increase in potential particulate matter, sulfur dioxide, nitrogen oxide, and/or carbon monoxide emissions.
 - (iv) A computer dispersion modeling analysis showing the Acceptable Ambient Concentrations will be protected if the proposed project results in an increase in emissions of any hazardous air pollutant listed in ch. NR 445, Wis. Adm. Code so that the resulting facility total emissions of the hazardous air pollutant are above the corresponding Table Value(s) OR results in the emission of any hazardous air pollutant listed in ch. NR 445, Wis. Adm. Code that was not previously emitted, at a rate greater than its corresponding Table Value(s); and
 - (v) An analysis showing the proposed project will not cause the total facility wide potential emissions of particulate matter, sulfur dioxide, nitrogen oxides or carbon monoxide to exceed 100 tons per year. Any proposed new or relocated source that will result in the facility wide potential emissions of any one of these pollutants exceeding 100 tons per year is not eligible for this waiver. If the facility wide potential emissions of any one of the pollutants would be greater than 100 tons per year as the result of a proposed project, the permittee shall comply with the construction permit requirements outlined in ch. NR 406, Wis. Adm. Code and the significant operation permit revision requirements of s. NR 407.13, Wis. Adm. Code.
 - [ss. 299.80(10) and (11)(b), Wis. Stats.]
 - (b) The Department has 14 calendar days from the date that all the information outlined in (a) is received to request additional information or object to the proposed project. If the Department requests additional information during the original 14 calendar day period the Department shall have an additional 7 calendar days from the date of receipt of the information to request additional information or object to the proposed project. Under no scenario shall the Department have less than 14 days to review original submittal. If the Department does not respond within 14

⁸ This requirement is necessary because if the potential emissions of particulate matter, sulfur dioxide, nitrogen oxide or carbon monoxide emissions exceeds 100 tons the facility would be considered a major source for Part 70 purposes and would be required to obtain either a Part 70 source permit or a synthetic minor, non-Part 70 source permit containing conditions that limit the potential emissions of all criteria pollutants to less than 100 tons per year.

calendar days from the date that all the information outlined in (a) is submitted, or within 7 days from the date that any additional information requested by the Department is submitted, whichever is later, the permittee may commence initial operation of the proposed equipment. The Department may provide written approval to commence initial operation of the proposed equipment prior to the end of the 14 calendar day period. If this is the case the permittee may commence initial operation upon receipt of this written approval. [ss. 299.80(2)(h) and (11)(b), Wis. Stats.]

- (3) Alternate Scenario #3: The permittee may initially operate new process equipment prior to obtaining a construction permit provided the permittee submits a complete construction and operation permit application as required by the conditions of I.A.5.a. and the following conditions are met: [s. 299.80(2)(h) and (4)(b), Wis. Stats.]
- (a) The Department provides written approval to commence initial operation of the proposed equipment. This written approval shall only be provided after the Department completes an air quality dispersion modeling analysis to ensure that the national ambient air quality standards and acceptable ambient concentrations will be protected while the proposed equipment is operating; [s. NR 406.09, Wis. Adm. Code]
- (b) The permittee shall comply with any specific conditions included in the Department's written approval to commence initial operation;
- (4) The permittee shall continue to comply with all the requirements of Part I.A. of this permit so long as the cooperative agreement is in affect. [s. 299.80(2)(h) and (4)(b), Wis. Stats.]
- (5) Nothing in this section or in any Cooperative Agreement between the Department and the permittee shall be construed as a guarantee that the Department will issue an air pollution control construction and operation permit for a proposed project. The decision on whether to approve a permit application will be made according to the requirements of chapters NR 400 through NR 499, Wis. Adm. Code and s. 285.60 through 285.69, Wis. Stats. If the Department denies a permit application pursuant to ss 285.61 through 285.64, Wis. Stats. all costs and risks associated with installing and operating the proposed equipment shall be incurred solely by the permittee. In the event that the construction and operation permit application for the proposed project is denied, the permittee shall cease construction and/or operation of the equipment in question immediately.

⁹ By continuing to comply with the facility wide emission limitations outlined in Part I.A. the net emissions increase from any new sources or relocation of any existing sources from other facilities, will not exceed the major stationary source levels of s. NR 405.02(22)(a), Wis. Adm. Code triggering Prevention of Significant Deterioration (PSD) Requirements. The existing facility potential emissions of all criteria pollutants is less than 250 tons per year and the facility is not included in the source categories listed in s. NR 405.07(4), Wis. Adm. Code, therefore the existing facility is a synthetic minor source for PSD purposes. Note: This facility is not located in an area designated nonattainment. Also, by continuing to comply with the facility wide emissions limitations, the potential emissions increase from any new sources or relocated existing sources will not exceed 100 tons per year after controls for any criteria pollutant. Therefore none of the changes will be considered a Type II action requiring an environmental assessment. Finally, by continuing to comply with the facility wide emission limitations, the facility would not become a major source for Part 70 purposes for either volatile organic compound or hazardous air pollutant emissions. Requirement I.A.5.a.(1)(g) of this permit requires that any changes that result in potential facility wide emissions of particulate matter, sulfur dioxide, nitrogen oxide or carbon monoxide emissions exceeding 100 tons per year follow permit issuance requirements of chs. NR 406 and NR 407, Wis. Adm. Code.

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6. Facility Wide Reporting Requirements

- **a.** Submit the results of monitoring or a summary of monitoring results required by Part I.A. of this permit to the Department annually.
- (1) The time period to be addressed by the submittal are: January 1 to December 31.
- (2) The report shall be submitted to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 30 days after the end of each reporting period.
- (3) All deviations from and violations of applicable requirements shall be clearly identified in the submittal.
- (4) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [s. NR 439.03(1)(b), Wis. Adm. Code]
- **b.** Submit a certification of compliance with the requirements of Part I.A. of this permit to the Department annually.
- (1) The time period to be addressed by the report is the January 1 to December 31 period which precedes the report.
- (2) The report shall be submitted to the Wisconsin Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 60 days after the end of each reporting period.
- (3) The information included in the report shall comply with the requirements of Part II Section N of this permit.
- (4) Each report shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [s. NR 439.03(1)(c), Wis. Adm. Code]
- c. Report actual facility wide volatile organic compound and hazardous air pollutant emissions as follows:
- (1) The permittee shall submit a report summarizing the actual, facility wide volatile organic compound and hazardous air pollutant emissions for each consecutive 12 month period as calculated in conditions I.A.1.b.(2) and I.A.2.b.(2) and (4), every 6 months.
- (2) The period addressed by the report shall be the 6 month period starting on the date the Cooperative Agreement is signed or other date agreed upon and approved by DNR, U.S. EPA and the permittee, and each subsequent 6 month period thereafter.
- (3) A copy of the report shall be submitted to the DNR (Marty Sellers, Air Management Engineer, Department of Natural Resources, 3550 Mormon Coulee Road, La Crosse, WI 54601) and the U.S. EPA (Steve Rothblatt, Branch Chief, Air Program Branch, U.S. EPA, 77 W. Jackson Blvd., Mailcode: AR-18J, Chicago, IL 60604) within twenty days following the end of the reporting period.
- (4) If the report shows the actual facility wide volatile organic compound or hazardous air pollutant emissions have exceeded 50 percent of the allowable limitations outlined in conditions I.A.1.a and I.A.2.a.(1) and (2), the permittee shall provide an explanation why emissions reached the levels that they did and how they intend to ensure emissions will not exceed the allowable limitations outlined in conditions I.A.1.a. and I.A.2.a.(1) and (2).
- [s. NR 439.03(1)(a), Wis. Adm. Code]

7. Compliance Testing Requirements

- **a.** Whenever compliance emission tests are required by the Department:
- (1) Any compliance emission tests required by the Department shall be conducted while operating at 100% capacity. If operation at 100% capacity is not feasible, the sources shall operate at a capacity which is approved by the Department in writing.
- (2) The reference test methods outlined in this permit shall be used unless an alternate, U.S. EPA approved, test method is approved by the Department in writing.
- (3) The Department shall be informed at least 20 working days prior to any tests so a Department representative can witness the testing.
- (4) At the time of notification, a compliance test plan shall also be submitted for approval.
- (5) Two copies of the report on any required tests shall be submitted to the Department for evaluation

within 60 days after the tests. [s. NR 439.07, Wis. Adm. Code]

- B. Part I.A. of this operation permit is effective so long as the permittee is operating under a Cooperative Agreement with the Department as entered into under s. 299.80 Wis. Stats. If any such Cooperative Agreement expires or is revoked for any reason, Part I.A. of this operation permit is no longer effective and Part I.B. becomes the effective operation permit for the facility. If any such Cooperative Agreement expires or is revoked for any reason, the permittee shall comply with any delayed compliance deadlines and practical interim requirements established by the Department in a written revocation decision until the Department issues the approvals required under chs. 280 to 295, Wis. Stats, that were replaced by the above referenced Cooperative Agreement.
- 1. P03, Stack S03 2 Lithographic Presses each with a Natural Gas/Propane Drying Oven Installed 1991 (PLO-05-H and PLO-07-H)

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
a. Particulate Matter Emissions	(a) Emissions may not exceed 0.15 pounds per mmBtu heat input. [s. NR 415.06(2)(a), Wis. Adm. Code]	(a) The permittee shall only fire natural gas and/or propane in each drying oven. ¹⁰ [ss. NR 407.09(1)(c)1.b., Wis. Adm. Code and 285.65(3) and 285.63(1)(a), Wis. Stats.]	(a) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Methods 5 and Method 202 shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code] (b) The permittee shall retain on site, plans and specifications that indicate each drying oven's fuel usage design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]
b. Visible Emissions	(a) Emissions may not exceed 20% opacity [s.	(a) The permittee shall only fire natural gas and/or propane in each drying	(a) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 shall be used to demonstrate

Because the maximum theoretical emissions while firing these fuels are less than the allowable limit of 0.15 pounds per million Btu heat input, limiting the type of fuel used is adequate to demonstrate compliance with the particulate matter emission limit. Maximum theoretical particulate matter emissions were calculated using an emission factor of 7.6 pounds per million cubic feet of natural gas fired from AP-42, 5th edition, ch. 1.4.

These plans and specifications are sufficient because each drying oven is designed to only burn natural gas and/or propane.

¹² It is not expected that the visible emission limitation of 20% opacity would be exceeded while firing these fuels. Therefore restricting the type of fuel used is adequate to ensure compliance with the emission limitation.

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
	NR 431.05, Wis. Adm. Code]	oven. ¹² [ss. 285.65(3) and 285.63(1)(a), Wis. Stats.]	compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]
			(b) The permittee shall retain on site, plans and specifications that indicate each drying oven's fuel usage design capabilities. ¹³ [s. NR 439.04(1)(d), Wis. Adm. Code]

¹³ These plans and specifications are sufficient because each drying oven is designed to only burn natural gas and/or propane.

1. P03, Stack S03 - 2 Lithographic Presses each with a Natural Gas/Propane Drying Oven - (Continued)

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
c. Volatile Organic Compounds	(a) Latest Available Control Techniques: The permittee may not use coatings or inks with a VOC content greater than 1.8 pounds per gallon as applied. [s. NR 424.03(2)(c), Wis. Adm. Code]	(a) The permittee shall maintain the records required by I.B.1.c.(3)(c) to demonstrate compliance with I.B.1.c.(1)(a). [s. NR 407.09(4), Wis. Adm. Code]	 (a) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, US EPA Methods 18, 25, 25A or 25B shall be used to demonstrate compliance. [ss. NR 439.06(3)(a) and NR 407.09(4)(a)1., Wis. Adm. Code] (b) Reference Test Method for Volatile Organic Compound Content: Whenever compliance testing is required, U.S. EPA Method 24 shall be used to demonstrate compliance with the VOC content limitations. [s. NR 439.06(3)(b), Wis. Adm. Code] (c) The permittee shall keep the following records for each ink and other VOC containing materials used on the presses: (a) A unique name of identification number for each ink and other VOC containing material, as applied; and (b) The VOC content of each ink and other VOC containing material, as applied, in pounds per gallon. [s. NR 439.04(1)(d), Wis. Adm. Code.] (d) The permittee shall use U.S. EPA Method 24, or ink manufacturer's formulation data to determine the VOC content of the of the inks used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]

2. P08, Stack S08 - 1 Roll Coater with a Natural Gas/Propane Conveyor Oven rated at 0.8 mmBtu/hr - Installed 1991 (PCO-08-H)

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
a. Volatile Organic Compounds	(a) Latest Available Control Techniques: (i) The permittee may not use coatings or inks with a VOC content greater than 7.1 pounds per gallon as applied. (ii) The permittee may not use more than 500 gallons of coating per month, averaged over each 12-consecutive month period [s. NR 424.03(2)(c), Wis. Adm. Code]	(a) The permittee shall maintain the records required by I.B.2.a.(3)(c) to demonstrate compliance with I.B.2.a.(1)(a)(i). [s. NR 407.09(4), Wis. Adm. Code] (b) To demonstrate compliance with condition I.B.2.a.(1)(a)(ii), the permittee shall calculate the total gallons of coating used, averaged over each 12 consecutive month period by dividing the total gallons of coating used during each consecutive 12 month period by 12. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]	 (a) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, US EPA Methods 18, 25, 25A or 25B shall be used to demonstrate compliance. [ss. NR 439.06(3)(a) and NR 407.09(4)(a)1., Wis. Adm. Code] (b) Reference Test Method for Volatile Organic Compound Content: Whenever compliance testing is required, U.S. EPA Method 24 shall be used to demonstrate compliance with the VOC content limitations. [s. NR 439.06(3)(b), Wis. Adm. Code] (c) The permittee shall keep the following records for each coating and other VOC containing materials used on the coater: (i) A unique name of identification number for each coating and other VOC containing material, as applied; and (ii) The VOC content of each coating and other VOC containing material, as applied, in pounds per gallon. [s. NR 439.04(1)(d), Wis. Adm. Code.] (d) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content of the of the inks used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code] (e) The permittee shall keep monthly records of: (i) The amount of coating used on the coater in gallons per month; and (ii) The total gallons of coatings used averaged over each 12 consecutive month period as calculated in condition I.B.2.a.(2)(b). [s. NR 439.04(1)(d), Wis. Adm. Code]

2. P08, Stack S08 - 1 Roll Coater with Natural Gas/Propane Conveyor Oven - (Continued)

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
b. Visible Emissions	(a) Emissions may not exceed 20% opacity [s. NR 431.05, Wis. Adm. Code]	(a) The permittee shall only fire natural gas and/or propane in the conveyor oven. 14 [ss. 285.65(3) and 285.63(1)(a), Wis. Stats.]	 (a) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required, US EPA Method 9 shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code] (b) The permittee shall retain on site, plans and specifications that indicate the conveyor oven's fuel usage design capabilities. [s. NR 439.04(1)(d), Wis. Adm. Code]

 $^{^{14}}$ It is not expected that the visible emission limitation of 20% opacity would be exceeded while firing these fuels. Therefore restricting the type of fuel used is adequate to ensure compliance with the emission limitation.

¹⁵ These plans and specifications are sufficient because the conveyor oven is designed to only burn natural gas and/or propane.

3. P09, Stack S09 - 8 Screening Lines, seven consisting of 2 screening machines and one natural gas/propane drying oven, one consisting of one screening machine and one natural gas/propane drying oven, plus one single screening machine, plus two replacement screening machines (note: no more than 16 screening machines shall be operated at any one time). This source also includes 4 electric box ovens - Installed 1991 and 2001 (PSO-12-H; PSO-18-H; PSO-19-H; PSO-21-H; PSO-21-H; PSO-23-H; PSO-26-H; PSO-27-H; and PSO-H-30)

POLLUTANT	(1). LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
a. Particulate Matter Emissions	(a) Emissions may not exceed 0.15 pounds per mmBtu heat input. [s. NR 415.06(2)(a), Wis. Adm. Code]	(b) The permittee shall only fire natural gas and/or propane in each of the drying ovens that are not powered by electricity. [ss. NR 407.09(1)(c)1.b., Wis. Adm. Code and 285.65(3) and 285.63(1)(a), Wis. Stats.]	 (a) Reference Test Method for Particulate Matter Emissions: Whenever compliance emission testing is required, US EPA Methods 5 and Method 202 shall be used to demonstrate compliance. [s. NR 439.06(1), Wis. Adm. Code] (b) The permittee shall retain on site, plans and specifications that indicate the fuel usage design capabilities of each drying oven that is not powered by electricity. [s. NR 439.04(1)(d), Wis. Adm. Code]
b. Visible Emissions	(a) Emissions may not exceed 20% opacity [s. NR 431.05, Wis. Adm. Code]	(a) The permittee shall only fire natural gas and/or propane in each of	(a) Reference Test Method for Visible Emissions: Whenever compliance emission testing is required,

Because the maximum theoretical emissions while firing these fuels are less than the allowable limit of 0.15 pounds per million Btu heat input, limiting the type of fuel used is adequate to demonstrate compliance with the particulate matter emission limit. Maximum theoretical particulate matter emissions were calculated using an emission factor of 7.6 pounds per million cubic feet of natural gas fired from AP-42, 5th edition, ch. 1.4.

These plans and specifications are sufficient because each drying oven is designed to only burn natural gas and/or propane.

POLLUTANT	(1). LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
		the drying ovens that are not powered by electricity. ¹⁸ [ss. 285.65(3) and 285.63(1)(a), Wis. Stats.]	US EPA Method 9 shall be used to demonstrate compliance. [s. NR 439.06(9)(a)1., Wis. Adm. Code]
			(b) The permittee shall retain on site, plans and specifications that indicate the fuel usage design capabilities each drying oven that is not powered by
			electricity. ¹⁹ [s. NR 439.04(1)(d), Wis. Adm. Code]

3. P09, Stack S09 - 8 Screening Lines - (Continued)

POLLUTANT	(1). LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
c. Volatile Organic Compounds	(a) Latest Available Control Techniques: The permittee may not use coatings or inks with a VOC content greater than 6.4 pounds per gallon as applied. [s. NR 424.03(2)(c), Wis. Adm. Code]	(a) The permittee shall maintain the records required by I.B.3.c.(3)(c) to demonstrate compliance with I.B.3.c.(1)(a). [s. NR 407.09(4), Wis. Adm. Code]	 (a) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, US EPA Methods 18, 25, 25A or 25B shall be used to demonstrate compliance. [ss. NR 439.06(3)(a) and NR 407.09(4)(a)1., Wis. Adm. Code] (b) Reference Test Method for Volatile Organic Compound Content: Whenever compliance testing is required, U.S. EPA Method 24 shall be used to demonstrate compliance with the VOC content limitations. [s. NR 439.06(3)(b), Wis. Adm. Code]

¹⁸ It is not expected that the visible emission limitation of 20% opacity would be exceeded while firing these fuels. Therefore restricting the type of fuel used is adequate to ensure compliance with the emission limitation.

¹⁹ These plans and specifications are sufficient because each drying oven is designed to only burn natural gas and/or propane.

POLLUTANT	(1). LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
			 (c) The permittee shall keep the following records for each ink and other VOC containing materials used on the screening lines: A unique name of identification number for each ink and other VOC containing material, as applied; and The VOC content of each ink and other VOC containing material, as applied, in pounds per gallon. NR 439.04(1)(d), Wis. Adm. Code. (d) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content of the of the inks used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]

4. P36, Stack S36 - Towel Dryer - Installed 1991

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
a. Volatile Organic Compounds	 (a) No person may cause, allow or permit organic compound emissions into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 419.03(1), Wis. Adm. Code] (b) No person may cause, allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent the spillage, escape or emission of organic compounds, solvents or mixtures. [s. NR 419.03(2), Wis. Adm. Code] (c) No person may cause, allow or permit the disposal of more than 1.5 gallons of any liquid VOC waste, or of any liquid, semisolid or solid waste materials containing more than 1.5 gallons of any VOC, in any one day from a facility in a manner that would permit their evaporation into the ambient air during the ozone season, except as provided for in s. NR 419.07. [s. NR 419.04(1), Wis. Adm. Code] (d) Disposal during the ozone season shall be by methods approved by the department, such as incineration, recovery for reuse, or transfer in closed containers to an acceptable disposal facility, such that the quantity of VOC which evaporates into the ambient air does not exceed 15% (by weight) or 1.5 gallons in any one day, whichever is larger. [s. NR 419.04(2), Wis. Adm. Code] 	(a) The permittee shall maintain the records required by I.B.4.a.(3)(b) to demonstrate compliance with I.B.4.a.(1). [s. NR 407.09(4), Wis. Adm. Code]	(a) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, US EPA Methods 18, 25, 25A or 25B shall be used to demonstrate compliance. [ss. NR 439.06(3)(a) and NR 407.09(4)(a)1., Wis. Adm. Code] (b) For each batch of towels dried the permittee shall keep records of (i) the weight of the towels before drying; (ii) the weight of the towels after drying; and (iii) the calculated amount of VOCs that are emitted from the towel dryer. [s. NR 439.04(1)(d), Wis. Adm. Code]

5. P50, Stack S50 - Two Digital Printing Lines Each with an IR Curing Oven - Installed 2001

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
a. Volatile Organic Compounds	(a) Latest Available Control Techniques: The permittee may not use coatings or inks with a VOC content greater than 5.4 pounds per gallon as applied. [s. NR 424.03(2)(c), Wis. Adm. Code]	(a) The permittee shall maintain the records required by I.B.5.a.(3)(c) to demonstrate compliance with I.B.5.a.(1)(a). [s. NR 407.09(4), Wis. Adm. Code]	 (a) Reference Test Method for Volatile Organic Compound Emissions: Whenever compliance emission testing is required, US EPA Methods 18, 25, 25A or 25B shall be used to demonstrate compliance. [ss. NR 439.06(3)(a) and NR 407.09(4)(a)1., Wis. Adm. Code] (b) Reference Test Method for Volatile Organic Compound Content: Whenever compliance testing is required, U.S. EPA Method 24 shall be used to demonstrate compliance with the VOC content limitations. [s. NR 439.06(3)(b), Wis. Adm. Code] (c) The permittee shall keep the following records for each coating and other VOC containing materials used on the coater: (i) A unique name of identification number for each coating and other VOC containing material, as applied; and (ii) The VOC content of each coating and other VOC containing material, as applied, in pounds per gallon. [s. NR 439.04(1)(d), Wis. Adm. Code.] (d) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content of the of the inks used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]

6. P40, Stack S40 - Screen Cleaning Machine - Installed 1998

Because the facility is not located in brown, Calumet, Dane, Dodge, Door, Fond du Lac, Jefferson, Kenosha, Kewaunee, Manitowoc, Milwaukee, Outagamie, Ozaukee, Racine, Rock, Sheboygan, Washington or Waukesha counties, because the screen cleaning machine is a cold cleaner, and because not more than 1.5 gallons of solvent are added per day, it is exempt from the requirements of s. NR 423.03, Wis. Adm. Code, pursuant to s. NR 423.03(2)(a), Wis. Adm. Code. Therefore the screen cleaning machine is subject to the general emission limitations for volatile organic compounds outlined in ss. NR 415.03 and NR 419.04, Wis. Adm. Code which are included in Part II of this operation permit.

7. P14, Stack S14 - Miscellaneous Facility Wide Cleanup

Because cleanup is performed using a wipe cleaning operation and the facility is located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha counties, it is exempt from the requirements of s. NR 423.03, Wis. Adm. Code, pursuant to s. NR 423.03(2)(g)1., Wis. Adm. Code. The cleanup solvent use is subject to general emission limitations for volatile organic compounds outlined in ss. NR 419.03 and NR 419.04, Wis. Adm. Code which are included in Part II of this operation permit.

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
a. Volatile Organic Compounds Continued on Next Page	(a) Volatile organic compound emissions from the entire facility may not exceed 8.21 tons per month averaged over each 12 consecutive month period. [s. 285.65(7), Wis. Stats.]	 (a) Each day the permittee shall calculate the total volatile organic compound emissions from the facility as follows: [s. NR 407.09(4)(a)1., Wis. Adm. Code] E_{daily} = (1 ton/2000 lbs) x [(U₁ x W₁ x C₁) + (U₂ x W₂ x C₂) + + (U_n x W_n x C_n)] where: E_{daily} is the daily VOC emissions (tons/day); U is the daily usage of each ink, coating, solvent, or other VOC containing material used during the day (gallons/day); W is the density of each ink, coating, solvent, or other VOC containing material used during the month (pounds/gallon); C is the VOC content of each ink, coating, solvent, or other VOC containing material used during the day expressed as a weight fraction (i.e. if a material is 25% VOC by weight C would be 0.25); n identifies each ink, coating, solvent or other VOC containing material used during the day. (b) For each calendar month the permittee shall calculate the total monthly VOC emissions as follows. This calculation shall be performed within fifteen calendar days of the end of each month. [s. NR 407.09(4)(a)1., Wis. Adm. Code] E_{monthly} = ΣE_{daily} - {(1 ton/2000 lbs) x [(S₁ x P₁) + (S₂ x P₂) + + (S_m x P_m)]} where: E_{monthly} is the monthly VOC emissions (tons/month) taking into account credit for the waste solvents that are collected and shipped off site for disposal; ΣE_{daily} is the sum of the daily VOC emissions calculated in I.B.8.a.(2)(a) totaled for the calendar month; S is the amount of each spent ink, coating, solvent or other VOC containing material recovered each month and shipped off site (gallons/month); P is the VOC content of each spent ink, coating, solvent or other VOC containing material recovered each month and shipped off site in pounds per gallon; midentifies each spent ink, coating, solvent or other VOC containing material recovered each month and shipped off site. 	(a) The permittee shall keep daily records of the following: (i) A unique name or identification number for each ink, coating, solvent, or other VOC containing material used at the facility; (ii) The VOC content, expressed as a weight fraction (C _n) of each ink, coating, solvent, or other VOC containing material used at the facility; (iii) The amount of each ink, coating, solvent, or other VOC containing material used in gallons per day (U _n); (iv) The density of each ink, coating, solvent, or other VOC containing material used in pounds per gallon (W _n); and (v) The total daily VOC emissions from the facility in tons per day (E _{daily}), as calculated in I.B.8.a.(2)(a). [s. NR 439.04(1)(d), Wis. Adm. Code]

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
a. Volatile Organic Compounds - (Continued)		(c) To demonstrate compliance with condition I.B.8.a.(1)(a), the permittee shall calculate the total tons of volatile organic compound emissions from the facility, averaged over each 12 consecutive month period by dividing the total monthly volatile organic compound emissions as calculated in I.B.8.b.(2)(b) for each 12 consecutive month period by 12. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]	 (b) The permittee shall keep monthly records of: (i) The monthly sum of the daily VOC emissions as calculated in I.B.8.a.(2)(b), (∑E_{daily}); (ii) The amount of spent ink, coating, solvent, or other VOC containing material recovered each month and shipped off site in gallons per month (S_m); (iii) The VOC content of each spent ink, coating, solvent or other VOC containing material recovered each month and shipped off site in pounds per gallon (P_m); (iv) The total monthly VOC emissions from the facility in tons per month as calculated in I.B.8.a.(2)(b), (E_{monthly}); and (v) The total amount of VOC emitted from the facility averaged over each 12 consecutive month period in tons per month as calculated in I.B.8.a.(2)(c). [s. NR 439.04(1)(d), Wis. Adm. Code] (c) The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content (C_n) and the density (W_n) of the of the inks, coatings, solvents or other VOC containing materials used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code] (d) The permittee shall analyze the spent ink, coating, solvent and other VOC containing material recovered and shipped off site to determine the VOC content (P) no less than: (i) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (ii) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
b. Hazardous Air Pollutants Regulated by the Clean Air Act Continued on Next Page	(a) The permittee may not emit any single hazardous air pollutant regulated by the Clean Air Act at a rate greater than 0.83 tons per month averaged over each 12 consecutive month period. [s. 285.65.(7), Wis. Stats.] (b) The permittee may not emit a total of all hazardous air pollutants regulated by the Clean Air Act combined at a rate greater than 2.08 tons per month averaged over each 12 consecutive month period. [s. 285.65.(7), Wis. Stats.]	(a) Each day the permittee shall calculate the total facility emissions of each hazardous air pollutant regulated by the Clean Air Act as follows: ²⁰ E _x = (1 ton/2000 lbs) x [(U ₁ x W ₁ x H ₁) + (U ₂ x W ₂ x H ₂) + + (U _n x W _n x H _n)] where: E _x is the daily emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/day); x identifies each HAP emitted from the facility U is the daily usage of each ink, coating, solvent, or other HAP containing material used during the day (gallons/day); W is the density of each ink, coating, solvent, or other HAP containing material used during the day (pounds/gallon); H is the HAP content of each ink, coating, solvent, or other HAP containing material used during the day expressed as a weight fraction (i.e. if a material is 25% HAP by weight H would be 0.25); n identifies each ink, coating, solvent or other HAP containing material used during the day; [s. NR 407.09(4)(a)1., Wis. Adm. Code]	(a) The permittee shall keep daily records of the following: (i) A unique name or identification number for each ink, coating, solvent, or other HAP containing material used at the facility; (ii) The weight fraction of each HAP contained in the material (H _n) of each ink, coating, solvent, or other HAP containing material used at the facility; (iii) The amount of each ink, coating, solvent, or other HAP containing material used in gallons per day (U _n); (iv) The density of each ink, coating, solvent, or other HAP containing material used in pounds per gallon (W _n); (v) The facility total daily emissions of each HAP in tons per day (E _x), as calculated in I.B.8.b.(2)(a); and (vi) The total daily HAP emissions from the facility in tons per day (E _{hap}), as calculated in I.B.8.b.(2)(d). [s. NR 439.04(1)(d), Wis. Adm. Code]

²⁰ This calculation shall be performed for each hazardous air pollutant regulated by the Clean Air Act that is emitted from the facility.

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
b. Hazardous Air Pollutants Regulated by the Clean Air Act - (Continued)		 (b) For each calendar month the permittee shall calculate the total monthly as emissions of each hazardous air pollutant regulated by the Clean Air Act as follows. This calculation shall be performed within fifteen calendar days of the end of each month. [s. NR 407.09(4)(a)1., Wis. Adm. Code] Ey = (ΣEx)i - {(1 ton/2000 lbs) x [(S1 x I1) + (S2 x I2) + + (Sm x Im)]} where: Ey is the monthly emissions of each HAP (tons/month) taking into account credit for the waste solvents that are collected and shipped off site for disposal; (ΣEx)i is the sum of the daily emissions of each HAP (i) calculated in I.B.8.b.(2)(a) totaled for the calendar month; S is the amount of each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site (gallons/month); I is the HAP content of each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site in pounds per gallon; m identifies each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site. (c) To demonstrate compliance with condition I.B.8.b.(1)(a), the permittee shall calculate the emissions of each hazardous air pollutant regulated by the Clean Air Act, averaged over each 12 consecutive month period by dividing the total monthly emissions of each hazardous air pollutant regulated by the Clean Air Act as calculated in I.B.8.b.(2)(b) for each 12 consecutive month period by 12. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. 	 (b) The permittee shall keep monthly records of: (i) The monthly sum of the daily emissions of each HAP regulated by the Clean Air Act as calculated in I.B.8.b.(2)(b), ((ΣΕ_x)_i); (ii) The amount of spent ink, coating, solvent, or other HAP containing material recovered each month and shipped off site in gallons per month (S_m); (iii) The amount of each HAP contained in each spent ink, coating, solvent or other HAP containing material recovered each month and shipped off site in pounds per gallon (I_m); (iv) The total monthly emissions of each HAP in tons per month as calculated in I.B.8.b.(2)(b), (E_y); (v) The total amount of each HAP emitted from the facility averaged over each 12 consecutive month period in tons per month as calculated in I.B.8.b.(2)(c); (vi) The total monthly emissions of all HAPs combined in tons per month as calculated in I.B.8.b.(2)(e); and (vii) The total amount of all HAPs combined emitted from the facility averaged over each 12 consecutive month period in tons per month as calculated in I.B.8.b.(2)(f). [s. NR 439.04(1)(d), Wis. Adm. Code]
Next Page		[s. NR 407.09(4)(a)1., Wis. Adm. Code]	

POLLUTANT	(1) LIMITATIONS	(2) COMPLIANCE DEMONSTRATION METHODS	(3) REFERENCE TEST METHODS, RECORDKEEPING, AND MONITORING REQUIREMENTS
b. Hazardous Air Pollutants Regulated by the Clean Air Act - (Continued)		(d) Each day the permittee shall calculate the <u>total</u> emissions of hazardous air pollutants regulated by the Clean Air Act as follows: $E_{hap} = \Sigma E_x$ where: $E_{hap} \text{ is the daily total emissions of all hazardous air pollutants regulated by the Clean Air Act that are emitted by the facility (tons/day); E_x \text{ is the daily emissions of each hazardous air pollutant regulated by the Clean Air Act (tons/day) as calculated in I.B.8.b.(1)(a); x identifies each HAP emitted from the facility. [s. \text{ NR } 407.09(4)(a)1., \text{ Wis. Adm. Code}] (e) For each calendar month the permittee shall total the daily emissions of all hazardous air pollutant regulated by the Clean Air Act combined by totaling the monthly emissions of each HAP (E_y) as calculated in I.B.8.b.(2)(b) to determine the monthly emissions in tons per month. This calculation shall be performed within fifteen calendar days of the end of each month. [s. NR 407.09(4)(a)1., Wis. Adm. Code] (f) To demonstrate compliance with condition I.B.8.b.(1)(b), the permittee shall calculate the total emissions of all hazardous air pollutants regulated by the Clean Air Act, averaged over each 12 consecutive month period by dividing the total monthly emissions of all hazardous air pollutants regulated by the Clean Air Act as calculated in I.B.8.b.(2)(e) for each 12 consecutive month period by 12. This calculation shall be performed within fifteen calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]$	(c) The permittee shall use coating manufacturer's formulation data to determine the HAP content (H _n) of the of the inks, coatings, solvents or other HAP containing materials used. [s. NR 439.04(1)(d), Wis. Adm. Code] (d) The permittee shall analyze the spent ink, coating, solvent and other HAP containing material recovered and shipped off site to determine the HAP content (H) no less than: (i) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (ii) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

9. Conditions Applicable to the Entire Facility

CONDITION TYPE	(1) CONDITIONS	
a. Reporting	 (a) Submit the results of monitoring or a summary of monitoring results required by Part I.B. of this permit to the Department annually. (i) The time period to be addressed by the submittal are: January 1 to December 31. (ii) The report shall be submitted to the Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 30 days after the end of each reporting period. (iii) All deviations from and violations of applicable requirements shall be clearly identified in the submittal. (iv) Each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [s. NR 439.03(1)(b), Wis. Adm. Code] (b) Submit a certification of compliance with the requirements of Part I.B. of this permit to the Department annually. (i) The time period to be addressed by the report is the January 1 to December 31 period which precedes the report. (ii) The report shall be submitted to the Wisconsin Department of Natural Resources, La Crosse Area Office, 3550 Mormon Coulee Road, Room 104, La Crosse, WI 54601, phone (608) 785-9000 within 30 days after the end of each reporting period. (iii) The information included in the report shall comply with the requirements of Part II Section N of this permit. (iv) Each report shall be certified by a responsible official as to the truth, accuracy and completeness of the report. [s. NR 439.03(1)(c), Wis. Adm. Code] 	
b. Compliance Testing	(a) Whenever compliance emission tests are required by the Department: (i) Any compliance emission tests required by the Department shall be conducted while operating at 100% capacity. If operation at 100% capacity is not feasible, the sources shall operate at a capacity which is approved by the Department in writing. (ii) The reference test methods outlined in this permit shall be used unless an alternate, U.S. EPA approved, test method is approved by the Department in writing. (iii) The Department shall be informed at least 20 working days prior to any tests so a Department representative can witness the testing. (iv) At the time of notification, a compliance test plan shall also be submitted for approval. (v) Two copies of the report on any required tests shall be submitted to the Department for evaluation within 60 days after the tests. [s. NR 439.07, Wis. Adm. Code]	